(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 873 653 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
04.06.2008 Bulletin 2008/23

(43) Date of publication A2:
02.01.2008 Bulletin 2008/01

(21) Application number: **07111349.2**

(22) Date of filing: **16.08.1996**

(51) Int Cl.:
G06F 15/76 *(2006.01)* ***G06F 9/30*** *(2006.01)*

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

(30) Priority: **16.08.1995 US 516036**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
96928129.4 / 0 845 120

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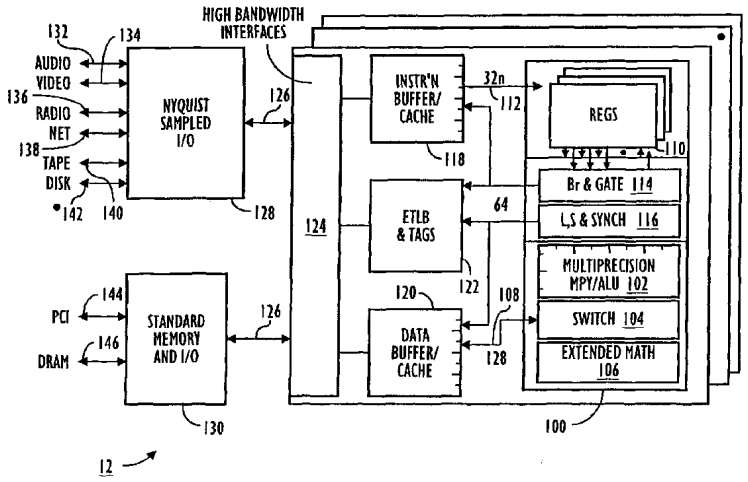
(54) General purpose, programmable media processor

(57) A general purpose, programmable media processor (12) for processing and transmitting a media data streams. The media processor (12) incorporates an execution unit (100) that maintains substantially peak data through out of media data streams. The execution unit (100) includes a dynamically partionable multi-precision arithmetic unit (102), programmable switch (104) and programmable extended mathematical element (106). A high bandwidth external interface (124) supplies media data streams at substantially peak rates to a general purpose register file (110) and the execution unit. A memory management unit, and instruction and data cache/buffers (118, 120) are provided. The general purpose, programmable media processor (12) is disposed in a network fabric consisting of fiber optic cable, coaxial cable and twisted pair wires to transmit, process and receive single or unified media data streams.

FIG. 7



EP 1 873 653 A3

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PARTIAL EUROPEAN SEARCH REPORT

which under Rule 63 of the European Patent Convention shall be considered, for the purposes of subsequent proceedings, as the European search report

Application Number EP 07 11 1349

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 132 898 A (SAKAMURA KEN [JP] ET AL) 21 July 1992 (1992-07-21) * column 2, line 66 - line 68 * * column 8, line 3 - line 14; figures 4,7,15 *	1-3,16, 18,21	INV. G06F15/76 G06F9/30
X	DIEFENDORFF K ET AL: "THE POWERPC USER INSTRUCTION SET ARCHITECTURE" IEEE MICRO, IEEE SERVICE CENTER, LOS ALAMITOS, CA, US, vol. 14, no. 5, 1 October 1994 (1994-10-01), pages 30-41, XP000476678 ISSN: 0272-1732 * page 31, left-hand column, line 6 - line 16; figure 1 * * page 38, right-hand column, line 29 - line 33; table 3 *	1-3,16, 18-21	

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TECHNICAL FIELDS SEARCHED (IPC)

G06F

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

Place of search	Date of completion of the search	Examiner
The Hague	28 April 2008	Michel, Thierry

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04E07)

European Patent Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number EP 07 11 1349

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	GWENNAP L: "ULTRASPARC ADDS MULTIMEDIA INSTRUCTIONS OTHER NEW INSTRUCTIONS HANDLE UNALIGNED AND LITTLE-ENDIAN DATA" MICROPROCESSOR REPORT, MICRODESIGN RESOURCES, MOUNTAIN VIEW, CA, US, 5 December 1994 (1994-12-05), pages 16-18, XP000561690 ISSN: 0899-9341 * the whole document *	4-10, 12-16, 18-21	
A	KOHN L ET AL: "THE VISUAL INSTRUCTION SET (VIS) IN ULTRASPARCTM" DIGEST OF PAPERS OF THE COMPUTER SOCIETY COMPUTER CONFERENCE (SPRING) COMPCON. TECHNOLOGIES FOR THE INFORMATION SUPERHIGHWAY. SAN FRANCISCO, MAR. 5 - 9, 1995, LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. CONF. 40, 5 March 1995 (1995-03-05), pages 462-469, XP000545454 ISBN: 0-7803-2657-1 * page 463, left-hand column, line 17 - right-hand column, line 5; figures 1,2 * * page 464, left-hand column, line 3 - line 18 * * page 466, right-hand column, line 16 - line 18 *	4-10, 12-16, 18-21	TECHNICAL FIELDS SEARCHED (IPC)
A	"MC88110 Second Generation RISC Microprocessor User's Manual , Section 5" MC88110 SECOND GENERATION RISC MICROPROCESSOR USER'S MANUAL, 1991, page COMPLETE26, XP002088724 * pages 5-10, line 16, paragraph 5.3.2 - pages 5-17, line 3 *	4-10, 12-16, 18-21	

EPO FORM 1503 03.82 (P04C10)

European Patent Office

INCOMPLETE SEARCH
SHEET C

Application Number
EP 07 11 1349

Claim(s) searched incompletely:
1-10,12-16,18-21

Claim(s) not searched:
11,17

Reason for the limitation of the search:

The present application is a divisional application. According to Art. 76 EPC, a divisional application may be filed only in respect of subject-matter which does not extend beyond the content of the earlier application as filed.

In claim 1, no basis could be found in the original description for the following features:
selected from a plurality of sizes.
at least one of said registers for providing data;
to read data from the register; and
to provide the data elements to a register;
The G.SWAP.16 operation and not instruction disclosed page 69 of the description and in the figure on the top of page 70, which appears to be the one supporting the claimed subject-matter, discloses only reversing 16 bits data elements. No support for a selectable data element size could be found in the description.
No basis could be found for a reverse instruction reading data from a register and writing said reversed data to a register. The G.SWAP.16 operation discloses only an operation reversing 16 bits data elements without mentioning neither the origin nor the destination of the data.

In claim 10, no basis could be found in the original description for the features:
de-interleaving instruction;
size specified by the de-interleaving instruction;
thereby de-interleaving the specified data elements.

In claim 11, no basis could be found in the original description for the features:
duplicate instruction to cause the execution means to duplicate data elements.

In claim 17, no basis could be found in the original description for the features:
group shift and interleave instructions.
Pages 153-157 of the original description, basis could be found for group shift instructions and for group shuffle instructions. Said shuffle instructions performing an interleave operation.

The Applicant is referred to Enlarged Board of Appeal decision G0001/06, which addresses the case of a divisional application which does not meet the requirements of Art. 76(1) EPC.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 07 11 1349

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-04-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5132898 A	21-07-1992	NONE	